

L 41287-65  
ACCESSION NR: AP5000885

$$y = f(x)$$

(0.4)

and shows that if the zero solution of

$$\frac{dx}{dt} = Ax + X(x, f(x)) \quad (0.5)$$

is stable, asymptotically stable, or unstable, the zero solution of (0.1) is correspondingly stable, asymptotically stable, or unstable. The techniques used extend previous results, which were valid only in the algebraic case, to the transcendental case. Orig. art has: 193 equations.

ASSOCIATION: none

SUBMITTED: 27Dec63

ENC: 00

SUB CODE: MA

NO SOV REF: 0:0

OTHER: 001

*me*  
Card 2/2

PLISS, V.F.

Study of a transcendental case in the theory of stability of motion. Izv. AN SSSR. Ser. mat. 28 no. 4, 911-924 Jl-Ag '64.  
(MIRA 17,9)

PLISS, Viktor Aleksandrovich; PETROV, N.N., red.

[Nonlocal problems in the theory of oscillations] Ne-  
lokal'nye problemy teorii kolebanii. Moskva, Izd-vo  
"Nauka," 1964. 367 p. (MIRA 17:7)

PLISS, V. A. (Leningrad)

"Über einen kritischen Fall der Stabilität einer Bewegung."

report submitted for 3rd Conf on Nonlinear Oscillations, E. Berlin, 25-30 May 64.

PLISS, V.A.

The reduction principle in the theory of stability of motion. Dokl.  
AN SSSR 154 no.5:1044-1046 F'64. (MIRA 17:2)

1. Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova.  
Predstavлено akademikom V.I. Smirnovym.

ACCESSION NR: AP4012075

S/0020/64/154/002/0258/0270

AUTHOR: Pliss, V.A.

TITLE: Stability of motion in a doubtful case of two zero roots

SOURCE: AN SSSR. Doklady\*, v. 154, no. 2, 1964, 268-270

TOPIC TAGS: Lyapunov solution, motion stability, zero root, two zero root equation, vector function, mathematical analysis, differential equation, continuously-differentiable function

ABSTRACT: The study carried out by A.M. Lyapunov (Issledovanie odnogo iz osobennykh sluchayev zadachi ob ustoychivosti dvizheniya, An analysis of a special case of the problem of stability of motion, Leningrad, 1963) was analysis. The paper relates to stability in a doubtful case of two zero roots with a non-prime elementary divisor when the number of equations in the system is greater than two. In only one case the Lyapunov's analysis was not exhaustive. He proved the existence of the function  $\varphi(C)$  and

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ACCESSION NR: AP4012075

studied its properties in detail. He further established that the function  $\varphi(C)$  is continuously differentiable.  
From the forms of the systems

$$\begin{aligned} \frac{dp}{d\theta} &= cP(c, p, \zeta, \theta), \\ c^{-1} \frac{d\zeta}{d\theta} &= A\zeta + cF(c, p, \zeta, \theta), \end{aligned} \quad (1)$$

and

$$\begin{aligned} \frac{dp}{d\theta} &= CP(c, p, \zeta, \theta) + \varphi(c), \\ c^{-1} \frac{d\zeta}{d\theta} &= A\zeta + cF(c, p, \zeta, \theta), \end{aligned} \quad (2)$$

it follows that, for those  $C$  where  $\varphi(C) = 0$ , system (1) has a  $\omega$ -periodic solution

$$p = p_0(c, \theta), \quad \zeta = \zeta_0(c, \theta)$$

Lyapunov did not analyze the case when the function  $\varphi(c)$  in any

Card 2/3

ACCESSION NR: AP4012075

vicinity of the point  $C=0$  can assume a zero as well as a negative value. It can be proved that stability exists in this particular case. The following theorem is valid. If there exists such a set of positive numbers  $C$  containing the zero of its limit point so that  $\varphi(C)=0$  with  $C \in C$ , then the zero solution of the system

$$\begin{aligned}\frac{dr}{dt} &= r^{q+1} R_1(r, \theta) + r R_2(r, z, \theta), \\ \frac{d\theta}{dt} &= r^{q-1} + r^q \theta_1(r, \theta) + \theta_2(r, z, \theta), \\ \frac{dz}{dt} &= Az + Z(r, z, \theta).\end{aligned}\tag{3}$$

is stable with respect to the variables  $r$  and  $z$ . Orig. art. has: 11 equations.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova (Leningrad State University)

SUBMITTED: 22Jul63

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: MM

NO REF SOV: 001

OTHER: 000

Card 3/3

PLISS, V. A.

On conditional stability in critical cases. Dokl. AN SSSR 147  
no. 6:1292-1293 D '62. (MIRA 16:1)

1. Leningradskiy gosudarstvennyy universitet im. A. A. Zhdanova.  
Predstavлено akademikom V. I. Smirnovym.

(Differential equations)

PLISS, V. A.,

"Conditions of stability in critical cases,"

Report presented at the Conference on Applied Stability-of-Motion Theory and  
Analytical Mechanics, Kazan Aviation Institute, 6-8 December 1962

16-3-10 14535  
S/020/62/147/006/004/034  
B112/B186

AUTHOR: Pliss, V. A.

TITLE: Conditional stability in critical cases

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 6, 1962, 1292-1293

TEXT: The author considers a differential equation system

$$\frac{dx}{dt} = Px + X(x,y), \quad \frac{dy}{dt} = Qy + Y(x,y) \quad (1)$$

with constant matrices P and Q all the eigenvalues of which have positive real parts. Two theorems are derived, of which the first is as follows: If the zero solution of the system  $\frac{dy}{dt} = Qy + Y(0,y)$  is asymptotically stable for  $t \rightarrow +\infty$ , independently of the form of terms the order of which is higher than N, and if the expansion of the function  $X(0,y)$  starts with terms the order of which is not less than  $N+1$ , then there will exist a continuously differentiable function  $f(y)$  such that  $f(0) = 0$  and that each solution of system (1) that begins on the manifold  $x = f(y)$  remains on it. In addition, the zero solution of (1) will be asymptotically stable for  $t \rightarrow +\infty$  if the initial data satisfy the condition  $x = f(y)$ . The second

Card 1/2

Conditional stability in ...

S/020/62/147/006/004/034  
B112/B186

theorem is the converse of the first.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet im. A. A. Zhdanova  
(Leningrad State University imeni A. A. Zhdanov)

PRESENTED: June 8, 1962, by V. I. Smirnov, Academician

SUBMITTED: May 16, 1962

Card 2/2

PLISS, V.A.

Nonlocal problems in the vibration theory. Vest. LGU 17 no.13:  
30-46 '62. (MIRA 15:7)  
(Vibration)

PLISS, V.A.

- Boundedness of solutions to certain nonlinear differential equations  
of the third order. Dokl. AN SSSR 139 no.2:302-304 Ju '61. (MIRA 14:7)
1. Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova.  
Predstavлено академиком V.I. Smirnovym.  
(Differential equations) ..(Functions, Continuous)

PLISS, V.A.

The phenomenon of convergence in periodic nonlinear systems. Dokl.  
AN SSSR 138 no.2:301-304 My '61. (MIRA 14:5)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova.  
Predstavлено академиком V.I.Smirnovym.  
(Differential equations) (Convergence)

PLISS, V.A.

Existence of periodic solutions for certain nonlinear systems. Dokl.  
AN SSSR 137 no.5:1060-1062 Ap '61. (MIRA 14:4)

1. Leningradskiy gosudarstvennyy universitet im. A.A.Zhdanova. Pred-  
stavлено akademikom V.I.Smirnovym.  
(Differential equations, Partial)

PLISS, V.A. (Leningrad)

"An analysis of a transcendental case in the theory of motion stability"

Report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow 29 Jan - 5 Feb 64.

163400

23824

S/020/61/138/002/006/024  
C111/C222AUTHORS: Pliss, V.A.

TITLE: The phenomenon of convergence in nonlinear periodic systems

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 138, no. 2, 1961, 301-304

TEXT: The author considers

$$\frac{dx}{dt} = f(x, t) \quad (1)$$

where  $x = \{x^{(1)}, \dots, x^{(n)}\}$ ,  $f(x, t) = \{f^{(1)}(x, t), \dots, f^{(n)}(x, t)\}$ .  
 $f(x, t)$  is continuous;  $f(x, t + \omega) = f(x, t)$ ;  $f(x, t)$  is so that (1) has unique solutions for all  $x, t$ .

Let  $\xi = \{\xi^{(1)}, \dots, \xi^{(n)}\}$ ,  $\|\xi\| = \sum_{i=1}^n |\xi^{(i)}|$ . Let  $x(t, x_0, t_0)$

be the solution of (1) with the initial data  $t_0, x_0$ .

Let (1) have the convergence property if

I. all solutions  $x(t, x_0, t_0)$  are continuable for all  $t \geq t_0$ ,

II. (1) has a unique  $\omega$  - periodic solution  $x = \varphi(t)$ ,

Card 1/3

23824

S/020/61/138/002/006/024  
0111/C222

The phenomenon of convergence ...

III. this solution is stable in the sense of Lyapunov,  
IV. for every  $x(t, x_0, t_0)$  it holds

$$\lim_{t \rightarrow +\infty} \|x(t, x_0, t_0) - \varphi(t)\| = 0 \quad . \quad (2)$$

Let I. be satisfied : If to every point  $x_0$  there corresponds the point  $x(\omega, x_0, 0)$  then one obtains a homeomorphic mapping  $T$  of the space  $E_n$  into itself.

Theorem : In order that (1) has the convergence property it is necessary and sufficient that :

I. all solutions  $x(t, x_0, t_0)$  are continuable for  $t \geq t_0$  ;

II. there exists a closed bounded set  $F \subset E_n$  which for the mapping  $T$  goes over into itself ;

III. there exists a continuous function  $v(x, y)$  of the points  $x, y \in E_n$  with the properties : 1)  $v(x, y) \geq 0$  and  $v(x, y) = 0$  then and only then if

Card 2/3

23824

The phenomenon of convergence ...

S/020/61/138/002/006/024  
C111/C222

$x = y$ ; 2)  $v(x, y) \rightarrow \infty$  for  $\|y\| \rightarrow \infty$  for arbitrary  $x \in F$ ; 3)  
 $v(T(x), T(y)) \leq v(x, y)$  and if  $v(T(x), T(y)) = v(x, y)$  then  $x = y$ .  
 As an example the author gives the system

$$\frac{dx_k}{dt} = \sum_{j=1}^n b_{kj} x_j + h_k f(\sigma) + p_k(t), \quad \sigma = \sum_{i=1}^n \alpha_i x_i \quad (k=1, \dots, n) \quad (15)$$

where  $f'(\sigma) > 0$ ,  $p_k(t)$  is continuous and  $p_k(t + \omega) = p_k(t)$ ; under certain conditions (15) has the convergence property.  
 There are 2 Soviet-bloc and 1 non-Soviet-bloc references.  
 The reference to the English-language publication reads as follows:  
 J.L. Massera, Ann. of Math., 50, no. 3 (1949).

ASSOCIATION: Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova (Leningrad State University imeni A.A. Zhdanov)  
 PRESENTED: December 22, 1960, by V.I. Smirnov, Academician  
 SUBMITTED: November 25, 1960

Card 3/3

PLISS, Ya., inzh.; MAKHIN, S., inzh.

Automatic condensate discharger. Rech. transp. 24 no. L:54 165.

1. Leningradskiy gosudarstvennyy institut proektirovaniya na  
rechnom transporte. (MIRA 18:5)

L 65054-65 E	T(n)/EPA(w)-2/EWA(u)-2 IJP(c)
ACCESSION NR.	AT5009472 Z/0000/64/000/000/0254/0258
AUTHORS:	Pil'ss, Yu. A.; Soroiko, L. M.
TITLE:	Proton depolarization in cyclotrons
SOURCE:	Conference on Low Temperature Physics and Techniques. 3d, Prague, 1963. Physics and techniques of low temperatures; proceedings of the conference. Prague, Publ. House of the Czechosl. Academy of Sciences, 1964, 254-258
TOPIC TAGS:	proton accelerator, proton polarization, deuteron reaction, depolarization, relativistic particle, synchrocyclotron
ABSTRACT:	The authors first describe briefly a method of calculating the depolarization of resonance produced in a particle accelerator, based on linearization of the relativistic equation of spin motion in an external electromagnetic field, and then presents the results of depolarization calculations for protons investigated in Card 1/3

L-65054-65

ACCESSION NR: AT5009472

3

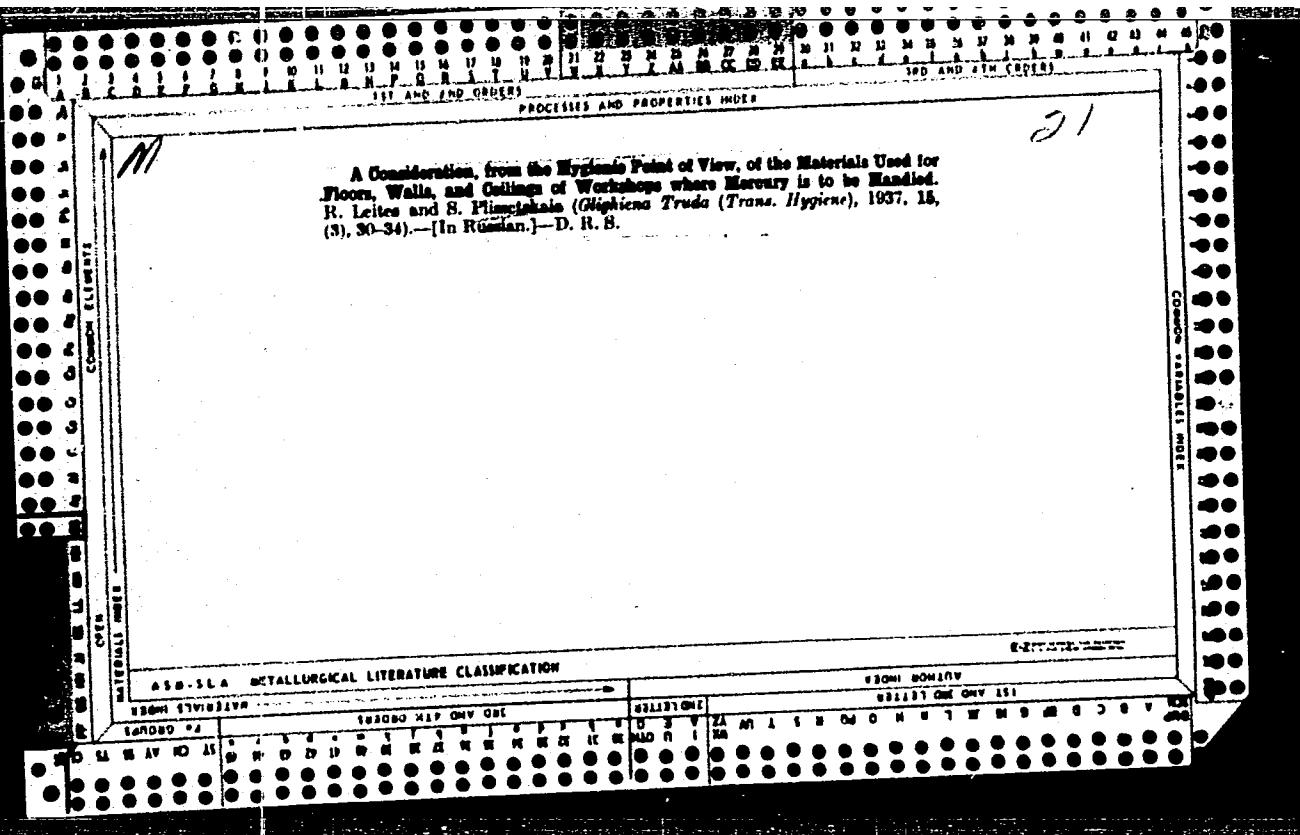
the synchrocyclotron of the Laboratory of Nuclear Problems of the Joint Institute of Nuclear Research in Dubna. An analysis shows that phase oscillations do not change the result of the calculation. The calculations of proton depolarization in a relativistic cyclotron were made on the basis of the design topography of the magnetic field, and were aimed at determining the requirements of shimming accuracy of the magnetic field. It is shown that the requirements for a relativistic cyclotron are somewhat more stringent than those for a synchrocyclotron because of the stronger radial and azimuthal variations of the magnetic field. It is reported that the depolarizing effects in the cyclotron with the azimuthal variation of the magnetic field of the I. V. Kurchatov Atomic Energy Institute have been calculated by this method and despite strong field modulation in this cyclotron, nonresonance depolarization is very small, while the resonance depolarization does not occur. "The authors thank V. P. Dmitriyevskiy and V. V. Kolga for valuable remarks." Orig. art. has: 2 tables and 13 formulas.

Card 2/3

L 65054-65		
ACCESSION NR:	AT5009472	3
ASSOCIATION:	Laboratory of Nuclear Problems, Joint Institute of Nuclear Research, Dubna	UNSS
SUMMITTED:	000064	ENCL: 00 SUB CODE: NP
NR REF Sovi:	003	OTHER: 001
<i>MJR</i> Card 1/3		

ZYULKOVSKIY, Zdislav [Ziolkowski, Zdislaw]; PLISSA, A.V., inzh.;  
[translator]; ROMANKOV, F.G., prof., red.; KUROCHKINA,  
M.I., red.; ERLIKH, Ye.Ia., tekhn. red.

[Liquid extraction in the chemical industry] Zhidkostnaia  
ekstraktsiia v khimicheskoi promyshlennosti. Leningrad.  
Goskhimizdat, 1963. 478 p. Translated from the Polish.  
(Extraction (Chemistry)) (MIRA 16:9)



PLISSKIN, G.I., inzhener.

Use of the equivalent rate of concentration in analyzing stage  
systems of evaporation. Teploenergetika 3 no.1:35-38 Ja '56.  
(MLRA 9:2)

1. Donetskoye otdeleniye kontory po organizatsii i ratsionalizatsii  
rayonnykh elektrostantsiy i seti.  
(Feed water--Testing)

PLISSKIN, G. I.

PERIODICAL ABSTRACTS

Sub.: USSR/Engineering

AID 4154 - P

PLISSKIN, G. I.

O PRIMENENII EKVIVALENTNOY KRATNOSTI KONTSENTRATSII K ANALIZU SKHEM STUPENCHATO GO ISPARENIYA (Equivalent ratio of salt content used for the analysis of the stage evaporation system). Teploenergetika, no. 1, Ja 1956: 35-38.

A general analysis of the performance of the stage evaporation system on the basis of the equivalent ratio of salt contents. Simplified methods of thermo chemical testing of boilers are discussed. One diagram.

PLISSOV, A. K.

"Oxydation des produits de petrole a des temperatures elevees". Plissov, A. K.:  
Grebennikova, M. D. (p. 547)

SO: Journal of General Chemistry  
(Zhurnal Obshchei Khimii) 1939, Volume 9, #6

PLISSOW, A. K.

"Sur la question de l'oxydation des hydrocarbures du pétrole". Plissow, A. K. (p. 516)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1936, Vol. 6, No. 4

PLISTIK, A.S.

Attachment for the repair of the differential gear of the reductor  
ZIU-5 trolleybuses. Rats. predl. na gor. elektrotransp. no.9:34-35  
'64.  
(MIRA 18:2)

1. Depo No.2 Tramvayno-trolleybusnogo upravleniya Leningrada.

Pliszczynski, Z.

Suitability of the indicator method for determining digestibility coefficients with pigs: digestibility of fish pastes and mushroom meal. J. Krupka, Z. Pliszczynski and J. Skulimowski (*Zesm. Nauk rol.* 1955, 62, B, 195-219).—In digestibility trials with pigs  $\text{Cr}_2\text{O}_7$  is preferable to  $\text{SiO}_2$  as an indicator substance. For Norwegian fish pastes and mushroom meal (*Cantharellus cibarius*), respectively, the digestibility data were: org. matter, 83.4, 89.6; crude protein, 78.7, 53.9; true protein, 99.5, 66.3; fibre, —, 85.0; N-free extractives, —, 91.7%.

A. G. POLLARD

HD

(2)

PLISZCZYNSKI, Zbigniew

SURNAME, Given Names

Country: Poland

(4)

Academic Degrees:

Affiliation:

Source: Warsaw, Medycyna Weterynaryjna, Vol XVII, No 8, August 1961, pp 471-474

Data: "Nutritional Values of Mixed Feed Concentrates Produced by the Fodder Industry."

Authors:

SKULMOWSKI, Jozef; Prof. dr.; Director of the Biochemistry Department (Zaklad Biochemii), Veterinary Institute (Instytut Weterynarii), Pulawy; and  
prof. of the Department of Physiological Chemistry (Zaklad Chemii Fizjologicznej), Higher Agricultural School (WSR-- Wysza Szkoła Rolnicza)  
Lublin.

DRZAS, Edward

PLISZCZYNSKI, Zbigniew

176

600 901403

PLISZCZYNSKI, Zbigniew

SURNAME, Given Names

Country: Poland

Academic Degrees:

Affiliation:

Sources: Warsaw, Medycyna Weterynaryjna, Vol XVII, No 8, August 1961, pp 471-474

Data: "Nutritional Values of Mixed Feed Concentrates Produced by the Fodder Industry."

Authors:

SKULMOWSKI, Jozef; Prof. dr.; Director of the Biochemistry Department (Zaklad Biochemii), Veterinary Institute (Instytut Weterynarii), Pulawy; and p f the Department of Physiological Chemistry (Zaklad Chemii Fizjologicznej), Higher Agricultural School (WSR--- Wysza Szkoła Rolnicza) Lublin.

DRZAS, Edward

PLISZCZYNSKI, Zbigniew

(5)

WAZNY, Mieczyslaw; PLISZCZYNSKA-BRENNENSTUHL, Maria

Radiological examination of the salivary glands with the use  
of water-soluble contrast media. Pol. przegl. radiol. 29 no.3:  
249-255 My-Je '65.

1. Z Zakladu Radiologii AM w Lublinie (Kierownik: doc. dr. med.  
K. Skorzynski) i z Kliniki Otolaryngologicznej AM w Lublinie  
(Kierownik: prof. dr. med. B. Dylewski).

PLISZKA, Anna

Investigations on the occurrence and methods for the determination  
of pathogenic streptococci in some food products. Roczn. panstw.  
zakl. hig. 14 no.4:411-420 '65.

1. Z Zakladu Badania Zywnosci i Przedmiotow Uzytku Panstwowego  
Zakladu Higieny (Kierownik: prof. dr. M. Nikonorow).

PLISZKA, A.

Direct determination of staphylococcal toxic agents in food extracts. Acta microb. polon 5 no.1-2:253-258 1956.

l. Z. Zakladu Badania Zywnosci i Przedmiotow Uzytku PZH w Warszawie.

(MICROCOCCUS PYOGENES,  
toxin, determ. in food (Pol))

(FOOD,  
determ. of Micrococcus pyogenes toxin (Pol))

PLISZKA, A

"Comparison of the Effect of Staphylococcus Exterotixin on Cats by Intravenous, Subcutaneous, and Intramuscular Injections." p. 466 (Dziennik Urzędowy, No. 4, 1953, Warszawa)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 6, June. 1954, Uncl.

PLISZKA, Anna

Cows as carriers of coagulase staphylococci in their udders.  
Rocznik panstwowy zakl. hig. 14 no. 2:199-204 '63

1. Laboratory for Testing Food and Articles of Common Consumption, State Institute of Hygiene, Warsaw.

PLISZKA, Anna

Phage types of enterotoxic staphylococci and phage differentiation  
of strains in epidemiological investigations and cases of food  
poisoning. Med.dosw.mikrob. 12 no.4:323-330 '60.

1. Z Zakladu Badania Zywosci i Przedmiotow Uzytku PZH.

(BACTERIOPHAGE)  
(STAPHYLOCOCCUS)  
(FOOD POISONING)

PLISZKA, A.

GREKONICZ, M.; PLISZKA, A.

"Results of biological studies on the toxicity of Pas home-produced food colorings"  
p. 247 (roczniki, No. 3, 1953, Warszawa)

SO: Monthly List of Selected Accessions, Library of Congress, March 1953, Uncl.  
4

PLISZKA, A.

POL. \*

*The action of Cr-30 on various types of microorganisms.*

Anna Pliska (Zaklad Badania Zwierciad i Przedmiotow Uzrytku P.Z.N., Warsaw). Roczniki Państwowego Zaklodu Hig. 3, 293-313(1952). - The effect, in milk, of various concns. of Cr-30 (from Belgium's "Sopura"), a bromoacetate of a higher alc., used as a food preservative, was noted on *Escherichia coli* (1); *Aerobacter aerogenes* (2); *Salmonella typhimurium* (3); *S. enteritidis* (4); *Micrococcus pyogenes* var. *ovinus* (5); *Streptococcus pyogches* (6); an *Enterococcus* (?) ; *Streptococcus faecii* (8); *S. cremoris* (9); *Bacillus mesentericus* (10); *Clostridium perfringens* (11); *C. tetanoputredinis* (12); *C. butyricum* (13); *Lactobacillus casei* (14); an *Aerobacter* sp.; *Saccharomyces cervisiae*; *S. ellipsoideus*; *Cladosporium herbarium*; *Allerularia tenuis*; and a *Fusarium* sp. For bacteria 1-14 1:1000-1:5000 was bacteriostatic while 1:1500-1:2000 was bactericidal; for the rest of the microorganisms 1:20,000 was bactericidal. The curdling and souring of milk by (1) and (5) were significantly delayed at 1:100,000 but there was no effect on bacterial growth. Dilns. of 1:20,000 and lower gave the product a foreign odor. 20 references. L. J. Plotrowski

PLISZKA, ANNA

Biological studies on the toxicity of four derivatives of α-aminobutyric acid used as food colors. Mazi Greczkowicz and Anna Pliszka. *Rozsuki Państwowego Zakładu Hig. 1953, 7/247-87* (English summary); cf. following abstract.

Four sodium salts of  $\beta$ -aminobutyric acid were tested. In the first expt., the dyes were given orally to rats in increasing daily doses from 0.2 to 1.0 g. per kg. body weight and then 1 g. per kg. for 10 successive days. Mice received orally 2 g. per kg. body weight for 10 successive days. Doses of 2 g. per kg. body weight were given to rabbits 3 times every 3 days. No differences were noted between expt. and control animals in general behavior or in the composition of urine. In autopsy, no pathological changes were found in the alimentary tract, livers, kidneys, and spleens. Histological studies also revealed no changes in these organs. Studies of the dye balance showed that a certain amt. of these compds. was partially decomposed in the body. In the second expt., daily doses of 60 mg. were given to young rats over a period of 5½ months. Similar quantities of dyes were given daily for a period of 3 months to the second-generation rats. No influence was observed on growth, development, and general behavior. Hematological studies also revealed no differences between expt. and control animals. Neither in autopsy, nor in histological examination was any change disclosed in the kidneys, livers, and spleens of the second-generation rats. Anna S. Szczęsnik.

(1)

BURBIANKA, Maria; PLISZKA, Anna; BURZYNSKA, Halina

Studies on the carriage of enterotoxic staphylococci in selected food plants and the correlation between phage and serological types, anti-biogram and enterotoxin production. Med.dosw.mikrob. 13 no.4:309-321 '61.

1. Z Zakladu Badania Zwyrodnosci i Przedmiotow Uzytku PZH.

(SALMONELLA) (FOOD microbiol)

MICHALSKI, J.; FLISZKA, B.

Reactions of dialkoxyoxophosphoranesulphenyl chlorides  $(RO)_2P(O)SCl$  with tetraalkyl esters of phosphorous phosphoric anhydride  $(R'O_2P-O-P(O)(OR'))_2$ . Synthesis of isomeric tetraalkyl thiopyrophosphates. Bul chim. PAN 10 no.6:267-269 '62.

1. Institute of Organic Synthesis, Polish Academy of Sciences, Warsaw, and Department of Organic Chemistry, Technical University, Lodz. Presented by O. Achmatowicz.

PLISZKA, B.

COUNTRY : POLAND  
CATEGORY : Organic Chemistry. Synthetic Organic Chemistry  
JGS. JOUR. : RZKhim., No. 1 1960, No. 1302  
AUTHOR : Michalski, J.; Wleczkiewicz, J.; Wasicki, J.;  
INST. : -  
TITLE : On Reactions of Organic Disulfides with Dialkyl  
          Thiophosphites, Dialkyl Thiophosphates and Sodium  
          Derivatives. A New Synthesis of O,O,S-trialkyl\*\*  
PUB. : Roczn. chem., 1959, 33, No 1, 247-250  
ABSTRACT : In the reaction of  $[(RO)_2P(O)S]_2$  (I) and sub-  
sequently R = C<sub>2</sub>H<sub>5</sub>) with (RO)<sub>2</sub>P(OR')<sub>2</sub> (II), (RO)<sub>2</sub>-  
P(S)OP(OR')<sub>2</sub> and (RO)<sub>2</sub>P(OR')<sub>3</sub> are formed,  
yielding 70%. From the Na-salt of I and R'3Si<sup>+</sup>

\*plisza, B.  
\*\*Thiophosphates, O,O,S-trialkyl Dithiophos-  
phates and O,S-dialkyl Hydrogen Phosphorothio-  
lates

CARD: 1/3

a-40

COUNTRY :	
CATEGORY :	
ABS. JOUR. :	RZKhim., No. 1 1960, No. 1302
AUTHOR :	
IPST. :	
TITLE :	
ORIG. PUB. :	
ABSTRACT cont'd	in C <sub>6</sub> H <sub>6</sub> (<20°), (RO) <sub>2</sub> P(O)SR' (II R' = n-C <sub>4</sub> H <sub>9</sub> , C <sub>6</sub> H <sub>5</sub> ) and R'SNa were obtained, with yields of 60-90%. III (R' = n-C <sub>4</sub> H <sub>9</sub> ) was synthesized, b.p. 135-136°/13 mm, n <sup>25</sup> D 1.4587. Analogously, from (RO) <sub>2</sub> PSNa and C <sub>4</sub> H <sub>9</sub> SSC <sub>4</sub> H <sub>9</sub> , (RO) <sub>2</sub> PS(C <sub>4</sub> H <sub>9</sub> ) <sub>2</sub> was obtained, with a yield of 64%, b.p. 145°/12 mm, n <sup>25</sup> D 1.4961. At an elevated temperature, II reacts with R'SNa and forms R'SP(O)(OR)ONa
CARD:	2/3

PLISZKA B.

Reactions of organic disulfides with dialkyl phosphites, dialkyl thiophosphites and sodium derivatives. A new synthesis of  $O,O,S$ -trialkyl thiophosphates,  $O,O,S$ -trialkyl dithiophosphates and  $O,S$ -dialkyl hydrogen phosphorothiolates. Jan Michałski, Jan Wieczorkowski, Jan Wasik, and Botente Pliszka (Politechnika, Łódź, Poland). Roczniki Chem. 33, 227-238 (1959) (in English).—The reactions between acyl disulfides (I) and dialkyl phosphites (II), dialkyl thiophosphites (III), or their Na derivs. (IV) and (V), resp., have been studied (b.p./mm. and  $n_D^{20}$  given for the compds. below). II react spontaneously only with I to give  $(RO)_2P(SO)(OR)_2$  (R = Et), 78-80°/0.03, 1.4453, and  $(RO)_2PSOH$  (R = Et), 62-3°/0.03, 1.4644, in 70% yield. IV react with I in  $C_4H_6$  at 20° as well as with diaryl or dialkyl disulfides (VI), R'SSR', to yield  $(RO)_2PO(SR')$  (R = Et, R' = Bu; 135-6°/18, 1.4587; (R = Et, R' = Ph), 115-16°/0.6, 1.5248; and R'SNa. An analogous reaction takes place between V and VI giving 64%  $O,O$ -diethyl S-butyl dithiophosphate, 145°/12, 1.4960. An ionic mechanism is suggested for this reaction. The reaction between IV and VI in boiling  $C_4H_6$  led to secondary dealkylation due to nucleophilic attack of an anion contg. S, which gave R'SP(O)(OR)ONa (VII) and R'SR. VII are characterized as cyclohexyramine salts: R = Et, R' = Bu, m. 125-6°; R = Et, R' = Ph, m. 130-1°. The yields of VII were 60-70%. A. Kreglewski

2 May  
4E2c (y)

4E3d  
7

PLISZKA, F.

Importance of aquatic fauna as food for fish in the light of Polish researches.

p. 429.

(POLSKIE ARCHIWUM HYDROBIOLOGII. Vol. 3, 1956, Warszawa, Poland)

SO: Monthly List of East European Acquisitions (EAL) LC. Vol. 6, no. 12, Dec. 1957.  
Uncl.

POLAND / Organic Chemistry: Organic Synthesis.

G-2

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 1227.

Author : Lesiak, T., Pliszka, H.  
Inst : Not given.  
Title : The Preparation of 2,4-Diaminobenzoic Acid From  
o-Nitroethylbenzene.

Orig Pub: Roczn. chem., 1957, 31, No 3, 1033-1035.

Abstract: 2,4-Diaminobenzoic acid (I) was synthesized — a probable starting material for the preparation of p-aminosalicylic acid. 2,4-Dinitroethylbenzene (II) was synthesized by the action of a mixture of 76 grams of  $\text{HNO}_3$  (d 1.5) and 128 grams of  $\text{H}_2\text{SO}_4$  (d 1.84) (40-50°C., 60 minutes; 90°C., 30-150 minutes) per 0.4 moles of o-nitroethylbenzene (b.p. 112-114°C./10mm.,  $d_4^{20}$  1.12;  $n_{D}^{20}$  1.5384), yield 64%, b. p. 162-164°C./10 mm.,

Card 1/2

MICHALSKI, Jan; PLISZKA-KRAWIECKA, Bozena; SKOWRONSKA, Aleksandra

Organophosphorus derivatives of sulfur and selenium. Pt.26.  
Rocznik chemii 37 no.11:1479-1487 '63.

1. Institute of Organic Synthesis, Polish Academy of Sciences, Lodz.

PLISZKOVA, A.

POLAND / General and Specialized Zoology. Insects. P  
Insect and Mite Pests.

Abs Jour : Ref Zhur - Biol., No 10, 1958, № 44834

Authors : Krauze, S.; Mlodecki, H.; PliszkoVA, A.; Burzynska, H.; Zaleski, S.

Inst Title : State Institute of Hygiene  
Title : Preliminary Studies in the Use of a High Frequency Current for the Destruction of Micro-organisms and Cereal Mites in Flour.

Orig Pub : Roczn. Panstw. zakl. hig., 1956, 7, №. 5,  
419-423.

Abstract : A generator creating an electric field of 27 kVc frequency (the wavelength was 11.1 m) was used. Satisfactory destruction of the rod-shaped *potato bacilli* (*Bacillus moscatoricus*) was not obtained in the experiments. The current had some effect on the vegetative forms of the rod-

Card 1/2

57

PLISZKOWE A.

COUNTRY	:	Poland	H-28
CATEGORY	:		
ASS. JOUR.	:	RZKhim., No. 21 1959, No.	76640
AUTHOR	:	<u>Pliszko<sup>w</sup>e, A.</u>	
INST.	:	Not given	
TITLE	:	On the Microflora in Pasteurized Hams	
ORG. PUB.	:	Przemysl Spozywczy, 12, no 4, 132-135 (1958)	
ABSTRACT	:	The author reviews research done by foreign scientists on the microflora in pasteurized hams. Questions pertaining to the technique used in pasteurization, the composition of the microflora in the hams, the possibility of the survival of pathogenic bacteria in the hams, and the complete removal of botulism bacteria, saprophytic bacteria, micrococci, and aerobic bacteria are discussed. Z. Fabinskiy	

CARD: 1/1

294

PLISZKOWA, A.

"Food poisoning", p. 10, (ZDROWIE, Vol. 5, No. 7, 1953, Warszawa, Poland)

SO: Monthly List of European Accessions, L.C., Vol. 3, No. 4, April, 1954

PLIT, I.G.

Mass transfer coefficient in the processes of chemisorption  
of gas by a large diameter drop. Ukr. khim. zhur. 31 no.9:  
979-986 '65. (MIRA 18:11)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut.

*Pl. 5 I.C.*

Theory of absorption complicated by an equilibrium chem. reaction in the liquid phase. L. O. Pozin (Chem. Tech. no. Inst., Dnepropetrovsk). Zhur. Tekhn. Kibernetika, 5, No. 31, 59-60 (1958); cf. Belopol'skiy, C.A., 41, 6027i. Belopol'skiy's 2nd-order differential equation (*loc. cit.*) integrated between specific limits is valid only for limiting cases, i.e. when the reaction zone is at the gas-liquid interface. A more general soln. is obtained by representing the liquid film  $\alpha$  as consisting of a neutralized zone  $\alpha_1$  and a non-neutralized zone  $(\alpha-1)\beta$ , at which the concn. of the dissolved gas decreases from  $x_1$ , at the gas-liquid film interface to  $x_2$  at the liquid film-liquid bulk interface, where  $x_2$  is the equil. concn. The generalized equation for the amt.  $G$  absorbed per unit area  $F$  per unit time  $t$ ,  $G/Ft = \beta(D_1/\delta)(x_1 - x_2)$ , consists of the coeff.  $K_1$  for simple absorption and the dimensionless group  $\beta$ , which is a function of  $R = \sqrt{K_1/D_1}$ , detd. by the effect of the chem. reaction on the absorption process; where  $D_1$  is the diffusion coeff. and  $K_1$  the chem. reaction rate const. (*loc. cit.*). Equations for 6 specific cases affecting  $\beta$  are given. Thus, when  $\alpha = 0$ , insol. gas, and the reaction occurs at the gas-liquid interface, Pozin's equation (C.A. 42, 156) is applicable.

*Jag*

PLIT, I.G. [Plit, I.H.]

Rectifying still with atomizing nozzle plates. Khim. prom. no. 43  
32-33 O-D '64. (MIRA 18;3)

PLIT, I.G.

Pulverizer-type scrubber-decarbonizer. Khim. prom. 40 no.8:  
621-624 Ag '64. (MIRA 18:4)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut.

PLIT, I.G.

Coefficients of mass transfer in gas absorption processes by  
large diameter drops. Izv. vys. ucheb. zav.; khim. i khim. tekhn.  
8 no.3:491-498 '65. (MIRA 18:10)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut imeni  
Dzerzhinskogo, kafedra protsessov i apparatov.

PLIT, I.G.

Theory of chemisorption in countercurrent gas streams and large-diameter dripping. Izv. vys. ucheb. zav.; khim. i khim. tekhn. (MIRA 18:1)  
7 no.5:842-851 '64

1. Kafedra protsessov i aparatov Dnepropetrovskogo khimiko-tehnologicheskogo instituta imeni F.E. Dzerzhinskogo.

PLIT, I.G.

USSR/Processes and Equipment for Chemical Industries  
Processes and Apparatus for Chemical Technology

K-1

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 14181

Author : Plit I.G., Shishkin K.N.

Title : Absorption of Carbon Dioxide by a Solution of Potash  
in a Bubble of Foam.

Orig Pub : Zn. prikl. khimii, 1956, 29, No 9, 1323-1329

Abstract : Study of the process /of absorption/ of CO<sub>2</sub> by a solution of potassium carbonate (I) depending upon the basic factors. Experiments were conducted in a unit where absorption was effected in an individual bubble of foam and consequently the surface of phase contact could be determined by calculations. A study was made of the effect of addition of surface active substance, saponin, (II), on absorption kinetics, and it was found that with low concentrations of II x < 0.6 g/liter, there is observed a decrease in rate of absorption, and absorption

Card 1/2

- 20 -

PLIT, I.G.

Theory of chemisorption in the direct flow of gas and "large" diameter drops. Zhur. prikl. khim. 38 no.7:1527-1535 JI '65. (MIRA 18:7)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut.

PLIT, I.G.

Analytical solution of a differential equation for mass transfer  
in a scrubber process of absorption in a laminar regime of phase  
motion. Report No.1. Trudy DKHTI no.10:17-26 '60. (MIRA 14:1)  
(Differential equations)  
(Scrubber (Chemical technology))

PLIT, I.G.

Absorption of carbon dioxide by a monoethanolamine solution  
in a scrubber with a pulverizing sprayer tray. Khim. prom.  
no.5:377-381 My '63. (MIRA 16:8)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut.

PLIT, I.G. [Plit, I.H.], kand. tekhn. nauk

Absorption of sulfur dioxide by water in a scrubber with  
jet nozzle plates. Khim. prom. [Ukr.] no.4:50-52 O-D'63.  
(MIRA 17:6)

~~PIOT. I.G.; NIJUS, S.G.~~

Absorption of hydrogen sulfide by potassium carbonate solution  
in a foam bubble. Trudy DKHTI no.16:161-172 '62 (MIRA 17:8)

Absorption of hydrogen sulfide by potassium carbonate solution  
in scrubbers with a porous packing. Ibid.:209-219

PLIT, I.G.; DAL', V.I.

Side adsorption of carbon dioxide in the potassium hydroxide  
process of the removal of hydrogen sulfide. Trudy IKHTI no.6:  
'58. (Carbon dioxide) (Hydrogen sulfide)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001341310013-4

PLIT, I.G.

Modeling of packed columns. Trudy IKHTI no.6:242-248 '58.  
(MIRA 13:11)

(Packed towers)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001341310013-4"

PLIT, I.G.

Kinetics of the regeneration process of absorbing solutions in  
potash-type sulfur purification. Zhur.prikl.khim. 30 no.1:167-169  
Ja '57. (MLRA 10:5)

1.Dnepropetrovskiy khimiko-tehnologicheskiy institut.  
(Potassium sulfide) (Sulfur)

PIT, I 6

✓ Regeneration of absorbing solutions in the potassium method of removing hydrogen sulfide from industrial gases.  
I. I. G. Pit (Chem.-Technol. Inst., Dnepropetrovsk).  
*Zhur. Fizikal. Khim.* 29, 1644-7 (1955). — The equil. consts.

*Chem. 1*

and the thermodynamic relations of the reactions involved in the scrubbing of H<sub>2</sub>S from industrial gases with K<sub>2</sub>CO<sub>3</sub>-KHCO<sub>3</sub> are analyzed. During regeneration of the soln., by boiling, the reactions KHS + KHCO<sub>3</sub> → K<sub>2</sub>CO<sub>3</sub> + H<sub>2</sub>S and 2KHCO<sub>3</sub> → K<sub>2</sub>CO<sub>3</sub> + CO<sub>2</sub> + H<sub>2</sub>O take place. The 2nd reaction is more rapid than the 1st and KHCO<sub>3</sub> does not decompr. in the absence of KHS. Thus, in a soln. with a mol. ratio of KHCO<sub>3</sub>/KHS = 2.15 all of the KHCO<sub>3</sub> is regenerated in 80 min., whereas only 10% of the KHS is converted; after 30 min. 70% of the KHCO<sub>3</sub> is regenerated and the proportion of KHS attains a const. value. It is necessary, therefore, to retard the decompr. of the former in order to accelerate the decompr. of KHS. This was accomplished by regenerating the solns. *in situ* from 145 to 700 mm. Hg. At 670-700 mm. Hg, corresponding to 54-55° (the temp. range at which KHCO<sub>3</sub> begins to decompr.), practically all of the KHS is decompr.. To prevent the accumulation of KHCO<sub>3</sub> a 2-stage regeneration cycle is suggested.

I. Demirwitz

PLIT, I.O.

Regeneration of absorbing solutions in the potassium method of  
removing hydrogen sulfide from industrial gases. Zhur. prikl.  
khim. 29 no. 11 1644-1647 N '56. (MLRA 10:6)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut.  
(Carbon dioxide) (Hydrogen sulfide)  
(Potassium carbonates)

P-17 G  
3  
484j

✓ Absorption of carbon dioxide from a bubble in potassium carbonate solution. I. G. Pil' and N. N. Shishkin (Zh. pri. khim., 1950, No. 1323 - 1325). The amount  $\alpha$  of liquid carried out of an  $K_2CO_3$  containing saponin by a vol. % of  $CO_2$  air bubbles rises to a max. as the saponin concn.  $C$  rises to ~0.1%. The ratio  $\alpha/\alpha_0$  increases with the rate of movement of the bubbles through the solution. The values of the const. of absorption of  $CO_2$  ( $k$ ) fall with increasing  $C$  to 0.06%, at which viscosity is max., and then rise to a const. value at  $C = 0.1\%$ . The value of  $k$  falls linearly with rising  $T$ , and temp., and rises with increasing  $[CO_2]$ .

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PLIT, I.G.

On the absorption theory of complicated equilibria of chemical  
reaction in the liquid phase. Zhur. prikl. khim. 31 no.1:54-60  
Ja '58. (MIRA 11:4)

1.Dnepropetrovskiy khimiko-tehnologicheskiy institut.  
(Absorption) (Phase rule and equilibrium)

PLIT, I.G.

Scrubber process absorbtion of sulfuric acid by the potassium carbonate solution. Zhur. prikl. khim. 31 no.2:186-191 F '58.  
(MIRA 11:5)

1. Dnepropetrovskiy khimiko-tehnicheskiy institut.  
(Sulfuric acid) (Potassium carbonate)  
(Scrubber (Chemical technology))

Plit I.G.

USSR/Chemical Technology - Chemical Products and Their  
Application. Elements. Oxides. Mineral Acids. Bases. Salts H-2

Abs Jour : Referat Zhur - Khimiya, No 1, 1958, 1870

Author : Plit I.G.

Inst :

Title : Kinetics of the Process of Regeneration of the Absorbent  
Solution in Potash Sulfur Purification. Communication II.

Orig Pub : Zh. prikl. khimii, 1957, 30, No 1, 167-169

Abstract : A study of the kinetics of the process of regeneration of  
the solution, in the first stage (of a 2-stage regenera-  
tion) has shown that the optimal conditions are a high in-  
tensity boiling of the solution and maximal possible ratio  
 $K - KHCO_3 : KHS$  (mole/mole) in the solution. Results of the  
experiments, with a duration of boiling of up to 10 minu-  
tes, are expressed by the empirical equation: degree of  
decomposition of KHS (in %) =  $8.15 \cdot t^{0.68} K^{0.24} 100^{0.0168}$

Card 1/2

PLIT, I.G.

Regularities of the process of chemisorption of gases by a moving drop  
of large diameter. Ukr. khim. zhur. 30 no.6:557-565 '64. (MIRA 18:5)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut.

PLIT, I.G.

Contribution to the theory of mass transfer in concentrated streams  
of drops of large diameters. Zhur. prikl. khim. 37 no.6:1301-1309  
Je '64. (MIRA 18:3)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut.

PLIT, I.G.

Theory of mass transfer in drops of small diameter in contact  
with gas of constant concentration. Zhur. prikl. khim. 38 no.1:  
135-143 Ja '65. (MIKA 18:3)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut.

PLIT, I.G. POLYANCHIKOV, I.N., inzh.

Comparative evaluation of atomizations in some designs of  
pneumatic low pressure nozzles. Khim. i neft. mashinostr.  
no. 6:23-26 D '64  
(MIRA 18:2)

PLIT, I. G.

Determination of the duration of contact and of the conditions  
of motion of interacting phases in a scrubber with an atomiza-  
tion nozzle. Izv. vys. ucheb. zav.; khim. i khim. tekhn. 5  
no.5:827-831 '62. (MIRA 16:1)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut imeni  
F. E. Dzerzhinskogo, kafedra protsessov i apparatov.

(Scrubber(Chemical technology))

PLIT, I.G.; SHISHKIN, K.N.

Absorption of carbon dioxide by potash solution in a foam  
bubble. Zhur.prikl.khim. 29 no.9:1323-1329 S '56. (MLRA 9:11)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut.  
(Carbon dioxide) (Scrubber (Chemical technology))

I 39748-65 EWT(1)/EWP(m)/EWA(j)/ENG(v)/EWA(b)-2/FCS(k)/EWA(l) S/0314/64/000/006/0023/0026 Pd-1/Pe-5/  
ACCESSION NR: AP5002216

P1-4 RO

AUTHOR: Plit, I. G., Polyanchikov, I. N. (Engineer)

31  
30

TITLE: Comparative evaluation of sprays in certain designs of low-pressure nozzles

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 6, 1964, 23-26

TOPIC TAGS: nozzle design, sprayer, particle size, liquid spray, atomization

ABSTRACT: At the authors' Institute, a sedimentometric device has been designed for the purpose of studying the particle size distribution of liquid sprays. Using this device, the various parameters affecting the size of the sprayed particles were analyzed. On the basis of 300 experiments, the following relationship was derived:

$$\frac{s_{sp}}{D} = A \left( \frac{\gamma \cdot \eta}{\rho \cdot w^2} \right)^n \left( \frac{\rho}{D \cdot \gamma \cdot \eta} \right)^{0.7},$$

where A is the proportionality coefficient;  $\gamma$ , the density of the solution in

Cord 1/2

L 39748-65 ACCESSION NR: AP5002216	kg/m <sup>3</sup> , σ, the surface tension of the solution in kg/m; ρ <sub>g</sub> , the gas density in kg sec <sup>-2</sup> /m <sup>4</sup> , and n, an exponent. Different types of nozzles designed to achieve an effective dispersion and reduce the internal resistance are illustrated and their characteristics are compared. Equations describing the atomizing processes of these nozzles were derived from the experimental data. Orig. art. has: 7 figures and 14 formulas.	
ASSOCIATION: Dnepropetrovskiy khimiko-tehnologicheskiy institut (Dnepropetrovsk Chemical Engineering Institute)	ENCL: 00	SUB CODE: PR, IE
SUBMITTED: 00 NO REF SOV: 004	OTHER: 000	
Card 2/2		

PLIT, I.G.; POLYANCHIKOV, I.N.

Sedimentation unit for determining the dispersion of liquid spray. Izv. vys. uchob. zav.; khim. i khim. tekhn. 7 no.3:  
505-609 '64. (MIRA 17:10)

1. Dnepropetrovskiy khimiko-tehnologicheskiv institut imeni Dzerzhinskogo, kafedra protsessov i apparatov.

PLIT, I.G.; POLYANCHIKOV, I.N.; IVANOV, S.M.

Some preliminary results of investigation of the dispersions by  
means of mechanical atomizers. Trudy DKHTI no.16:189-191 '63.  
(MIRA 17:2)

PLIT, I.G. [Plit, I.H.], kand. tekhn. nauk; GUPALO, M.T. [Hupalo, M.T.]

Adsorption of sulfur dioxide from water by activated carbons.  
Khim. prom. [Ukr.] no.3:39-41 Jl-S '63. (MIRA 17:8)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut.

41635  
S/080/62/035/009/007/014  
D234/D307

11.7410

AUTHOR:

Plit, I.G.

TITLE:

Investigation of the degree of dispersion of the spray  
in sprayers operating on the basis of gas flowing on  
either side of the surface of the liquid

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 9, 1962,  
1996 - 2007

TEXT: The average diameter of drops in the spray  $d$  depends on the  
gas velocity  $w$ , the specific weight of the liquid, the gas density  
the viscosity of the liquid, its surface tension, the diameter of  
the outlet aperture of the sprayer  $D$ , the characteristic linear di-  
mensions of the system  $l_1, l_2, \dots, l_n$ ; and on the ratio of volumes  
of the liquid and gaseous phases  $L/V$ . With the aid of dimensional  
analysis, the author obtains an expression for  $d/D$  in terms of the  
other parameters, containing unknown constants which must be deter-  
mined experimentally. For this purpose the author uses an optical  
method, improved by himself, in which  $d$  is calculated from the mea-  
sured intensity of light passing through a layer of spray. The ex-

Card 1/2

PLIT, I.G.; KUZNETSOV, Ye.G.; LOBODA, N.S.; SHEVCHENKO, A.I.

Investigation of the process of hydrogen sulfide removal from coke-oven gas by potassium solutions in a scrubber with a pulverizing-atomizing plate. Koks i khim. no.10:42-47 O '61.  
(MIRA 15:1)

1. Dnepropetrovskiy khimiko-tehnologicheskiy institut (for Plit). 2. Stalinskiy sovmarkhoz (for Kuznetsov). 3. Dnepropetrovskiy sovmarkhoz (for Loboda). 4. Yasinovskiy koksokhimicheskiy zavod (for Shevchenko).

(Hydrogen sulfide)

(Gas purification)

(Scrubber (Chemical technology))

PLIT, V.A.; BURMISTROV, S.I.

Acetylation of N-benzoyl sulfone derivatives of 6-aminohexanoic acid with acetic anhydride. Trudy DKHTI no.16:153-157 '63.  
(MIRA 17:2)

PLIT, V.A.; BURMISTROV, S.I.

The derivatives of caprolactame and 6-aminocaproic acid.  
Ukr. khim. zhur. 24 no.1:73-75 '58. (MIRA 11:4)

1.Dnepropetrovskiy khimiko-tehnologicheskiy institut.  
(Caproic acid) (Hexamethylenimine)

PLT VA

The rate of decomposition of sodium fluoroborate in alcohol-water mixtures. I. G. Kras and V. A. Plit (Met. Inst., Dnepropetrovsk). Zhur. Dnepropet. Khim. 25, 19-27 (1955); C.I.T. J. Gen. Chem. U.S.S.R. 25, 17-22 (1955) (Engl. translation).

The rate of decomposit. of the fluoroborate ion in the presence of base ( $\text{BF}_3 \cdot \text{OH}_2 + 4\text{OH}^- \rightarrow \text{B}(\text{OH})_4^- + 2\text{H}_2\text{O}$ ) was followed titrimetrically. The rate of decomposit. of  $\text{NaBF}_3$  (I) in a 1:1 (by wt.)  $\text{H}_2\text{O}-\text{CH}_3\text{COOH}$  mixt. (II) is 0.010 as fast as in pure  $\text{H}_2\text{O}$ , both at 50° and 70°. The solv. of I in  $\text{H}_2\text{O}-\text{CH}_3\text{COOH}$ ,  $\text{CH}_3\text{COOH}$ , and in  $\text{H}_2\text{O}-\text{CH}_3\text{COOH}$  mixt. was measured at various tempa. In  $\text{H}_2\text{O}$ , a eutectic m. -10.60° was found to contain 37.12% I. There was no evidence of cryst. hydrates of I. To obtain chemically pure I, slightly less than the calc'd. amt. of HBF<sub>4</sub> required for complete neutralization was added to  $\text{Na}_2\text{CO}_3$ . After excess was added and immediately neutralized with NaOH to a pink color with phenolphthalein. After small amts. of NaF were filtered off, the soln. was cooled, under a vacuum and I was recrystd. from II between 60° and 0°.

George J. Belch

PLITA, I.I.

Standard attachment for machining parts. Mashinostroitel'  
no. 5:20 My '64. (MIRA 17:7)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001341310013-4

KORENEVICH, A.I., dotsent; PLITAS, P.S., prof.

Answers to readers. Oft. zhur. 18 no.4252-253 '63 (MIRA 1784)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001341310013-4"

PLITAS, P.S., prof.

Factors in removing nonmagnetic splinters from the corner of the  
anterior chamber. Oft.zhur. 13 no.4:220-225 '58 (MIRA 11:8)

1. In kafedry glaznykh bolezney (zav. - prof. P.S. Plitas)  
Kieyevskogo ordena Trudovogo Krasnogo Znameni meditsinskogo  
instituta im. akad. A.A. Bogomol'tsa.  
(KEY--FOREIGN BODIES)

PLITAS, P. S.

35571 Vnedreniye resmits vnutr' glaznogo yabloka pri boyevykh travmakh organa zreniya.  
Sbornik k pyatidesyatiletiiu nauch., ped., vracheb. I obshchestv. Deyatel'nosti k.  
kh. orlova. Gor'kiy, 1949, C. 147-53

SO: Letopis' Zurnal'nykh Statey, Vol. 45, 1949

PLIMAS, P. S.

35572 Teoriya I praktika ottachivaniya glaznykh instrumentov. (Poroki rezhushchego lazno-go instrumentariya I vliyaniye ildi na khod operatsiy). Sbornik k pyatidesyatiletiju nauch., ped., vracheb. I obshchestv. Deyatel'nosti k. kh. orlova. Gor'kiy, 1949, C. 192-230

SO: Letopis' Zhurnal'nykh Statey, Vol. 45, 1949

PLITAS, Pavel Savvich; BELOSTOTSKIY, Ye.M., red.; GABERLAND, M.I., tekhn.  
red.

[Ophthalmoscopic atlas; manual for physicians and students] Oftal'-  
moskopicheskii atlas; rukovodstvo dlja vrachei i studentov. Mo-  
skva, Gos. izd-vo med. lit-ry Medgiz, 1960. 224 p. (MIRA 14:7)  
(OPHTHALMOSCOPY) (EYE—DISEASES AND DEFECTS)

L 13296-66

ACC NR: AP6000331

SOURCE CODE: UR/0286/65/000/021/0020/0020

INVENTOR: Drapkina, D. A.; Brudz', V. G.; Terskoy, Ya. A.; Doroshina, N. I.; 27  
Plitina, I. P.; Korol'kova, O. N. B

ORG: none

TITLE: A method for producing a phosphorogen of red 630-(639)-5-(4'-diethylamino-benzylidene)-barbituric acid. Class 12, No. 175969 [announced by the All Union Scientific Research Institute of Chemical Reagents and Especially Pure Chemical Substances (Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobu chistykh khimicheskikh Veshchestv)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 20

TOPIC TAGS: phosphorescent material, luminescence, surface active agent

ABSTRACT: This Author's Certificate introduces a method for producing a phosphorogen of red 630-(639)-5-(4'-diethylamino-benzylidene)-barbituric acid by condensation of barbituric acid with 4-dimethylaminobenzaldehyde in the presence of an alkali. The luminescence intensity of the product is increased by conducting the

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UDC: 547.854.5.07

L 13296-66

ACC NR: AP6000331

condensation in a aqueous medium in the presence of surface-active agents, e.g.  
OP-7.

SUB CODE: 07// SUBM DATE: 26Jun64/ ORIG REF: 000/ OTH REF: 000

jw  
Card 2/2

PLITKIN,A. (Leningrad)

Improving the "Record" and "ARZ" receivers. Radio no. 6:54 Je '55  
(Radio--Receivers and reception)